

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA**

1) VIDEO GAMING TECHNOLOGIES, INC.,)	
)	
)	
Plaintiff,)	
)	
v.)	Case No. 4:17-cv-00454-GKF-jfj
)	
1) CASTLE HILL STUDIOS LLC)	REDACTED
(d/b/a CASTLE HILL GAMING);)	
2) CASTLE HILL HOLDING LLC)	
(d/b/a CASTLE HILL GAMING); and)	
3) IRONWORKS DEVELOPMENT, LLC)	
(d/b/a CASTLE HILL GAMING))	
)	
Defendants.)	

**DECLARATION OF STACY FRIEDMAN IN SUPPORT OF PLAINTIFF'S
RESPONSE TO DEFENDANTS' MOTION FOR SUMMARY JUDGMENT**

Pursuant to 28 U.S.C. § 1746, I, Stacy Friedman, hereby declare the following:

1. I am the President of Olympian Gaming, LLC in Lake Oswego, Oregon, a position that I have held since 2001. I have been retained by Plaintiff Video Gaming Technologies, Inc. (“VGT”) in connection with this litigation. I make this declaration in support of Plaintiff Video Gaming Technologies, Inc.’s Response and Brief In Opposition to Defendants’ Motion for Summary Judgment. Except where otherwise noted, this declaration is based on my personal knowledge and certain opinions that I have formed in connection with this case.

2. In this case, I have been asked to render opinions relating to, *inter alia*, VGT’s claims for misappropriation of trade secrets and confidential business information. The opinions set forth in this declaration are based on my expertise as a casino game designer and my review of the evidence related to these claims, as described below.

I. Expert Qualifications

3. I am a professional casino game designer and mathematician, with over nineteen years of professional experience in developing regulated casino games, gaming mathematics, and professional software design expertise. I have personally designed, implemented, tested, and analyzed many games, including dozens of single- and multi-player wagering games for both Internet and land-based casinos, and I have consulted in the gaming industry regarding, among other things, game design and development, slot machine and table game mathematics, game software development, and gaming patent infringement and validity. I attach, as Exhibit A, a recent curriculum vitae, which details my educational and professional background, and I discuss below some of my specific experience in the area of casino game design.

4. My professional experience in the casino gaming industry started in 1998, when I joined Silicon Gaming, in Palo Alto, California as a game model engineer before it was

acquired by International Game Technology (“IGT”). Silicon Gaming designed and developed interactive video slot machines. As a game model engineer (mathematician), I worked on the designs of video slot games, video keno games, and video poker games; helped produce dozens of innovative new games for the Odyssey™ platform; and engaged regulatory agencies to achieve regulatory approval for the mathematics used in the games. In addition, I designed and developed game flow and storyboards for slot machines, and developed and shipped over 50 mathematical game models. I also served as a liaison to state regulatory agencies and corrected prior errors in gaming lab submissions, which led to savings of over \$50,000 in regulatory fees. I was also responsible for managing the statistical verification and mathematical gameplay testing for Silicon Gaming’s products.

5. In 2001, I started an independent casino game design and analysis consultancy, Olympian Gaming LLC. Based on my experience designing, developing, and placing dozens of games in Las Vegas, Reno, and Atlantic City casinos, I advise Internet casino software vendors, new game inventors, and casino game manufacturers in the fields of wagering gameplay design, mathematical analysis, and statistical verification. I have also served as a subject matter expert in many matters related to casino games or gaming technology, including over 20 cases involving gaming-related intellectual property.

6. I have invented and applied for patents on over two dozen gaming methods and systems and, together with my patent attorney and frequent co-inventor, control a patent portfolio of approximately forty issued and/or pending patents across several categories of the gaming industry. These innovations include novel table games, electronic wagering games such as slot machine and video poker games, and casino management systems. Part of my

business is directed toward transacting in (licensing or selling) these patents, and/or partnering with other entities to develop the technologies described in these patents.

7. As will be further described below, the category of games at issue in this dispute is known as “Class II,” which is defined as including “the game of chance commonly known as bingo.” There are several styles of bingo, but generally they all involve covering numbers on cards as numbers are drawn to complete predetermined winning patterns. I have significant experience with such games. In my work as a game designer, I have designed and/or mathematically analyzed many different types of bingo games for my clients, including American-style bingo (75 numbers and 5x5 cards with a central free space) as well as other games with different card shapes, quantities of available numbers, or rules for winning. For instance, in 2010 I worked with an Internet casino software vendor on a four-card bingo game. In 2013 I helped a social/online bingo operator understand the frequencies of its players achieving various bingo patterns and the impact on its virtual economy. And in 2015 I assisted a small Class II game vendor with adjustments to one of its Class II par sheets as well as development of (non-bingo) slot machine mathematics.

8. Further, in my work as a litigation expert or consultant, I have been involved with many bingo-related matters. I was retained as an expert in *HomeBingo v. Multimedia Games*, which involved a patent infringement allegation against Multimedia’s Class II “Reel Time Bingo” system. In 2010 I assisted the Alabama Attorney General in his investigation of whether Class II games operated in a non-tribal casino met the Alabama Supreme Court’s six-part test for legal bingo games. In 2011 I analyzed the behavior of certain electronic bingo games at the request of a Costa Rican legislator. And in 2011–2012, in *FortuNet v. Playbook Publishing*, I provided written and oral expert testimony related to whether

bingo game products sold by Playbook Publishing were related to the business of FortuNet or derivative of FortuNet's products.

9. In connection with my work as a game designer and casino industry consultant, I have also spent considerable amounts of time in casinos and at gaming industry conferences. That includes more than 500 visits to casinos, including more than 25 visits to casinos with Class II bingo-based gaming machines as well as visits to more than 20 conferences with Class II vendors. I also observed and played both VGT and CHG games, as well as third-party games, at the Indigo Sky Casino in Wyandotte, Oklahoma in October 2017. I have also seen many photographs, video recordings, and artists' renderings of VGT, CHG, and third-party games.

10. For my work in connection with this case, I am currently being paid my standard hourly rate of \$525 per hour. My compensation is not tied to the outcome of the case or to the opinions that I offer.

II. VGT's Bingo Card Algorithm

11. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

A. [REDACTED]

[REDACTED]

12. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

13. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

14. [REDACTED]

[REDACTED]

[REDACTED]

15. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

16. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

B. [REDACTED]

17. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

18. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

19. [REDACTED]

[REDACTED]

C. [REDACTED]

20. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

III. [REDACTED]

A. [REDACTED]

21. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

22. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

B. [REDACTED]

[REDACTED]

23. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

26. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

27. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

28. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

29. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

C. [REDACTED]
[REDACTED]

30. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

31. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

32. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁵ [REDACTED]

[REDACTED]

⁶ [REDACTED]

[REDACTED]

33. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

34. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

IV. Other Know-how

35. I have reviewed the Declaration of Chris Shults in Support of Plaintiff's Opposition to Defendants' Motion for Summary Judgment ("Shults Declaration") dated November 14, 2018. That declaration, along with the cited deposition testimony and documents, provides the factual basis for many of my opinions regarding VGT's know-how.

A. VGT Developed Significant Know-How Related To Its Class II Games

36. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

37. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

38. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

39. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

40. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

■ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

42. [REDACTED]

[REDACTED]

[REDACTED]

43. [REDACTED]

[REDACTED]

B. CHG Used VGT Know-How To Develop Its Own Class II System And Games More Quickly And At Lower Cost

44. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

45. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

46. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

47. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

48. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

49. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

50.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

51. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

52. [REDACTED]

53. [REDACTED]

[REDACTED] *See, e.g.,* Ex. 242, CHG0044794; Ex. 117, Sprinkle 7/11/18 Dep. Tr. 462–63; Ex. 216, CHG0019196–97; Ex. 217, CHG0094717–18; Ex. 116, Sisson 30(b)(6) Dep. Tr. 45–52; Ex. 119, Suggs Dep. Tr. 44–48; Ex. 243, VGT’s Dep. Ex. 404, CHG0124581; Ex. 102, Booker Dep. Tr. 202–33; Ex. 261, CHG0124213–21; Ex. 110, Morgan Dep. Tr. 226–27; Ex. 265, CHG0124577–82; Ex. 262, CHG0126328–29; Ex. 110, Morgan Dep. Tr. 51; Ex. 250, CHG0009901–02; Ex. 248, Milligan Dep. Tr. 65–71; Ex. 244, CHG0002333–36.

54. [REDACTED]

55. [REDACTED]

[REDACTED]


[REDACTED]

V. VGT's Trade Dress

56. The VGT and CHG games play similar sounds when the reels stop spinning, *i.e.*, the reel resolution sound. Ex. 65, VGT0010623; Ex. 166, VGT0007548. In particular, as each reel comes to a stop, both the VGT and CHG games play a sound similar to that of a digitized steel drum with a similar timbre and duration. Furthermore, the CHG reel resolution sounds have the same root/fifth/octave relationship as the VGT reel resolution sounds, except a half-step lower. To be even more specific, to the best of my knowledge, the VGT game plays the note C#4 (a halfstep above middle C) when the leftmost reel stops, the note G#4 when the middle reel stops, and the note C#5 (an octave above the first C#) when the rightmost reel stops. Similarly, to the best of my knowledge, the left, middle, and right reels on the CHG games play the notes C4 (middle C), G4, and C5 (again, an octave higher than C4), respectively, as each reel comes to a stop.

57. I declare under penalty of perjury that the foregoing is true and correct.

Executed on November 16, 2018 in Lake Oswego, Oregon.


Stacy Friedman

CERTIFICATE OF SERVICE

I hereby certify that on November 16, 2018, I filed a redacted version of the foregoing via ECF, which caused service to be effected on the following counsel for Defendants:

Robert C. Gill
Thomas S. Schaufelberger
Matthew J. Antonelli
SAUL EWING ARNSTEIN & LEHR, LLP
1919 Pennsylvania Avenue, NW, Suite 550
Washington, D.C. 20006
(202) 295-6605
(202) 295-6705 (facsimile)
robert.gill@saul.com
tschauf@saul.com
matt.antonelli@saul.com

Sherry H. Flax
SAUL EWING ARNSTEIN & LEHR, LLP
500 E. Pratt Street, Suite 900
Baltimore, Maryland 21202
(410) 332-8764
(410) 332-8785 (facsimile)
sherry.flax@saul.com

James C. Hodges, OBA 4254
JAMES C. HODGES, PC
2622 East 21st Street, Suite 4
Tulsa, OK 74114
Telephone: (918) 779-7078
JHodges@HodgesLC.Com

Duane H. Zobrist
Jonathan S. Jacobs
ZOBRIST LAW GROUP PLLC
1900 Arlington Blvd. Suite B
Charlottesville, VA 22903
Telephone: (434) 658-6400
dzobrist@zoblaw.com
jjacobs@zoblaw.com

Attorneys for Defendants

/s/ Michael Sawyer